It is evident that Edinger makes no distinction between the corpus restiforme and the inferior peduncle of the cerebellum. Vejas, in the article just cited, considers the two as distinct. The corpus restiforme forms the lateral part of the tract passing from the medulla to the cerebellum; the inferior peduncle its mesal part. This nomenclature is unfortunate, as the entire tract should be included in the term inferior peduncle, and then two divisions of the peduncle may be described.

THE PYRAMIDAL TRACT AND THE LEMNISCUS.—Monakow reported at the January meeting of the Neurological Society of Berlin (Neurologisches Centralbl., Feb, 1, 1885) some interesting observations upon the pyramidal tract and lemniscus. He had extirpated the right parietal lobe with the pyramidal termination in the cortex, in a cat. Six months after he found a total atrophy of the entire right pyramidal tract downward to the motor decussation, through which it could be followed to and along the pyramidal column of the spinal cord. In the anterior horn of the cord no change was found, although it is in the cells of this horn that the pyramidal fibres have been supposed to end. Monakow noticed, however, a decided atrophy of the cells in the processus reticularis throughout the cervical region. He therefore concludes that these cells are the terminal stations of the pyramidal fibres, and that from them arise new fibres which pass into the anterior

In the same animal he found a descending degeneration of the lemniscus from the parietal cortex downward through the division of the internal capsule, which lay near the middle of the thalamus, through the tegmentum and pons into the interolivary tract, and thence through the sensory decussation to the funiculus gracilis of the opposite side. This corresponds in part to the descending degeneration which was traced in Spitzka's case of pons lesion, although, as Monakow shows, the degeneration was somewhat less extensive in the cat.

When this result is compared with that of Vejas just recorded, and with the observations of Flechsig as detailed in his Plan des menschlichen Gehirns, it becomes evident that in the lemniscus there are fibres which degenerate both upward and downward. It follows, therefore, either that the lemniscus has a double function and conveys both centripetal and centrifugal impulses, or that the conclusion that tracts degenerate only in the direction in which they convey impulses is untrue.

A NEW LATERAL FASCICULUS IN THE SPINAL CORD.—At the meeting of the Psychiatrical Society of St. Petersburg, Dec. 10, 1884, (reported in the *Centralbl. f. Nervenheilkunde*, Feb. 15, 1885), Bechterew demonstrated a bundle of fibres lying in the anterior part of the lateral column of the spinal cord, between the anterior border of the direct cerebellar column and the exit of the motor

nerve-roots near the periphery. It is triangular in shape, its base lying next to the pyramidal column, its apex forward. It extends from the lower part of the lumbar enlargement up through the entire length of the cord, gradually increasing in size, and ends in the nucleus of the lateral column in the formatio reticularis of the medulla.

It degenerates upward after transverse lesions of the cord, and is distinguished from the direct cerebellar column in such lesion by its thickness.

Bechterew is of the opinion that it transmits sensations of pain,

his view being based on the experiments of Woroschiloff.

It is to be remembered that both Gowers and Haddon have described an area of ascending degeneration in the exact position described by Bechterew as the situation of this fasciculus, and that they have already advanced the opinion that this fasciculus has a sensory function. Bechterew states that this fasciculus receives a medullary sheath in the fœtus in the eighth month—that is, after the remainder of the lateral column and before the

pyramidal tract, a fact not noticed by Flechsig.

The existence of secondary ascending degenerations in this area in the cases of Bechterew, Gowers, and Haddon is not to be doubted. Is it not possible, in view of the fact that in a very large number of cases of well-marked ascending degeneration it was not found, that in these three cases an abnormal position or size of the direct cerebellar columns has led the authors to a rather hasty conclusion? Flechsig has shown that abnormal distribution of fibres in the columns of the cord is by no means rare. In one case in sixty the pyramids do not decussate. It seems therefore a more natural interpretation of the facts, that three abnormal cords have been examined by these authors, than that all previous investigators should have overlooked an important fact.

On Sensorial Localizations in the Cortex Cerebri.—Luciana publishes in *Brain* (part xxiv.) the result of his careful experiments upon sensory localization. They are as follows:

T. Disturbances of vision follow extirpation of the cortex of the parietal, temporal, and frontal lobes, as well as of the occipital lobes, but permanent loss of sight only occurs when the occipital and adjacent parts of the parietal lobes are destroyed. Small lesions in other parts than the visual area may not produce even temporary disturbance of vision. The visual area is, therefore, limited to the parieto-occipital region. In dogs and monkeys the optic decussation is partial, hence lesion of one occipital lobe produces in these animals bilateral homonymous hemianopsia. A connection between a definite part of the retina and a definite part of the visual area could not be proven. The visual area thus described is somewhat more extensive than that of Munk. Total extirpation of both occipital lobes produces absolute blindness at first, but